

## **Supporting information for**

### **Oleocanthal-rich extra-virgin olive oil restores the blood-brain barrier function through NLRP3 inflammasome inhibition simultaneously with autophagy induction in TgSwDI mice**

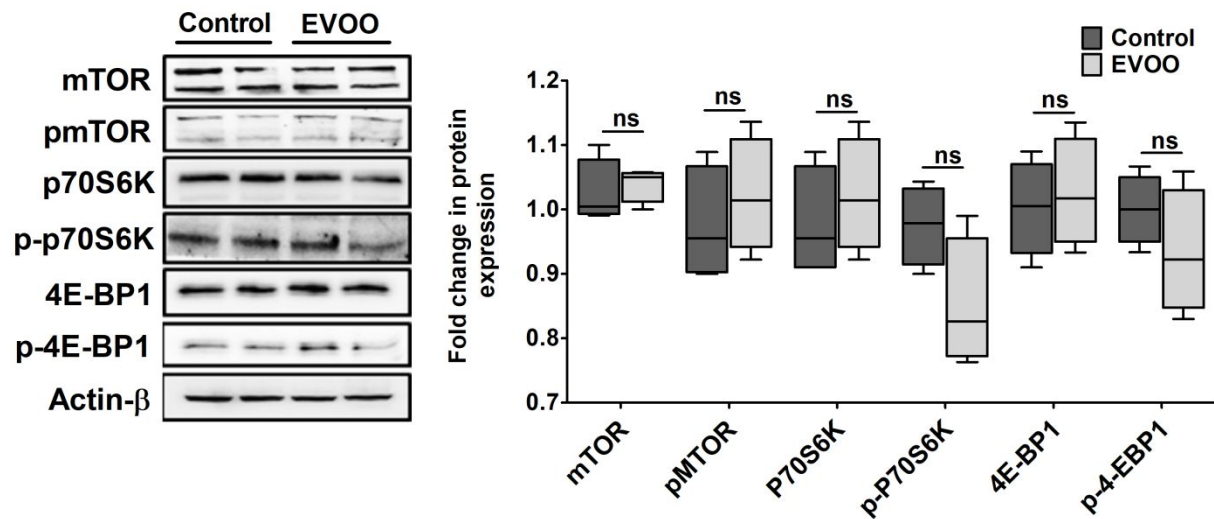
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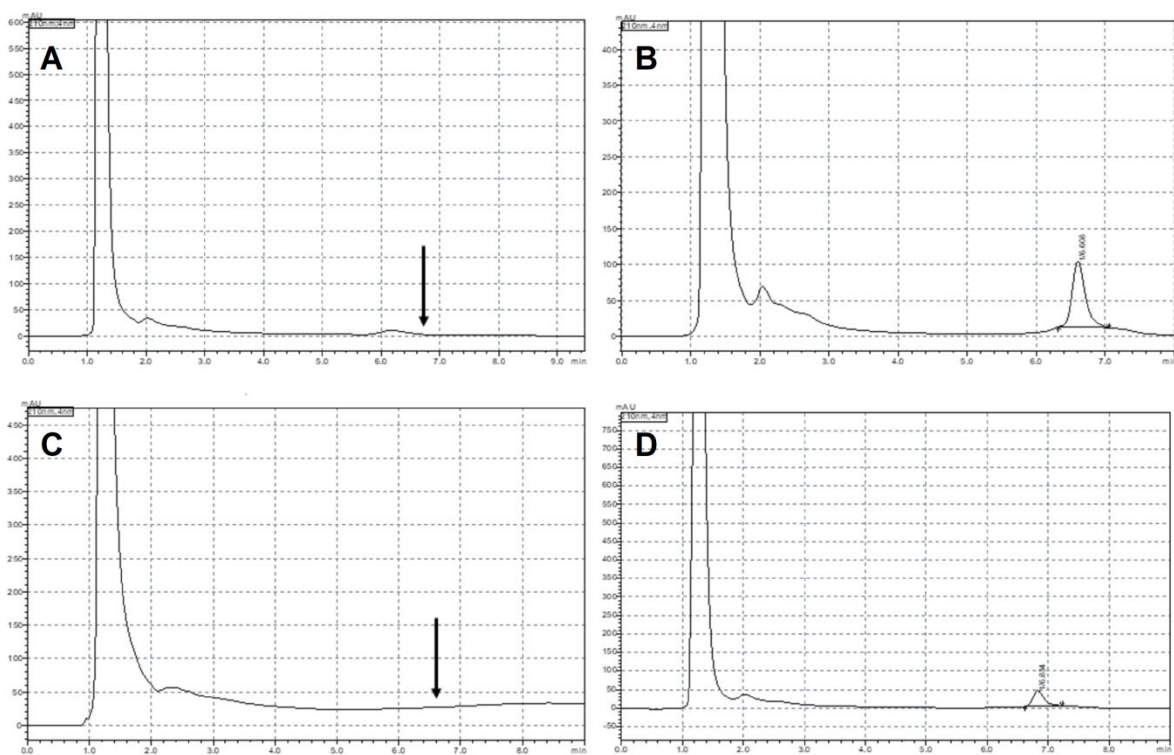
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**Figure S1.** EVOO induction of autophagy was not mediated through mTOR pathway. Representative blots and densitometry analysis of mTOR, phosphorylated mTOR (pmTOR), P70S6K, phosphorylated- P70S6K (p-P70S6K), 4EBP1, phosphorylated-4EBP1 (p-4EBP1) in brain homogenates of mice treated with EVOO and OO as control group. Data are presented as box-and-whisker plots representing median and IQR, with minimum and maximum values of n=7 mice in each group. Statistical analysis was determined by Student's t-test. ns = not significant versus control group.



**Figure S2.** Representative chromatograms from plasma and brain samples of mice received 10 mg/kg FEPPA. Plasma and brain samples were collected one hour after FEPPA injection. (A) Plasma and (B) brain samples of control mice received refined OO. (C) Plasma and (D) brain samples from EVOO treated mice. Arrows represent the retention time where FEPPA should appear in plasma samples.